

## **INERTIAL PROPULSION DRIVE**

### **Abstract**

An inertial thrust drive (10) comprising a centrifugal thrust generator (12) that comprises a first motor (14); with a weighted arm (16) comprising a radial arm (18) and a weight (20); a platform (22), a second motor (24); the entire assembly mounted on a thrust mount (26). The motor (14) rotates the weighted arm (16) in a counterclockwise rotational direction (30) to generate unbalanced centrifugal forces in its plane of rotation. The centrifugal thrust generator (12) is supported by the platform (22). The platform (22) rotates the thrust generator (12) in a clockwise direction of rotation (32) opposite to the arm (16) rotational direction (30). Both, the first motor (14) and the second motor (24) rotate about a common central axis (34). To generate a directional propulsion force (36), the weighted arm (16) generates unbalanced centrifugal forces in its plane of rotation; and the platform (22) rotates the thrust generator (12) in the opposite direction to maintain the arm (16) pointing in the same direction. The synergy of superimposing the rotational energy of the platform (22) on the thrust generator (12) generates a directional propulsion force (36). The propulsion force (36) vector is useful as a source of thrust for propellantless propulsion.